



## Aviation

# Network Infrastructure Solutions for Airports

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## Structured Cabling at Airports

Communication networks are vital to the operation of any airport. They support business and life-dependant operational systems, while also providing timely management data to support decision-making. In recent years, the number of network applications specific to the air travel industry has grown dramatically, far beyond traditional data and voice. With new airports being designed from the ground up, structured cabling for all applications has become an integral part of building design from the earliest stages.

## Airport Cabling Challenges – Why CommScope?

Airports are unusually demanding environments for technology. Tenants are constantly moving from one location to the next. Distances between central data facilities and end cabling points can be massive, such as the lengths needed for runway installations. Hazardous liquids (like aviation fuel) pose significant threats to traditional cabling features such as PVC cabling sheaths. Given these challenges and many more, cabling within these applications needs a provider with keen insight into the distinctiveness of the airport environment.

CommScope is that provider. A world leader in infrastructure solutions for communication networks, we have developed solutions that are customized to the challenges of airport functionality — like our security-tough, stress-optimized SYSTIMAX® Heavy Duty Indoor/Outdoor Fiber Optic Cable for Airport Applications.

CommScope has more than 130 airports and airline industry reference installations across the United States and around the world, to mention a few: Germany, Switzerland, Austria, Belgium, Bulgaria, Hungary, Spain, Turkey, United Kingdom, Ireland, Luxembourg, Russia, Nigeria, Qatar, Egypt, UAE, Saudi Arabia, China, Hong Kong, Singapore and South Korea.

## Applications

As airports become more technology-driven, cabling applications and opportunities continue to increase. Some applications are driven by trends, like electronic check-in points, intelligent runway lighting and biometric security / immigration control. Others support or enhance the functionality of the contemporary airport environment, from booking to takeoff, from retail stores to baggage carousels:

### Customer Interfacing

- Data
- Voice
- Point-of-sale devices
- Check-in desks
- Customer reservation systems: from Société Internationale de Télécommunications Aéronautiques (SITA) using Common Usage Terminal Equipment (CUTE)

### Environment

- Wi-Fi hotspots
- Business lounges: Internet access
- Energy management systems (HVAC)
- Lighting control systems
- Retail shops

### Directional Aids

- Digital signage
- Passenger information systems
- Flight information display systems (FIDS)
- Baggage information display systems (BIDS)
- Travel information display systems (TIDS)
- Gate information display systems (GIDS)
- Courtesy announcement systems
- Vehicle flow monitoring and control

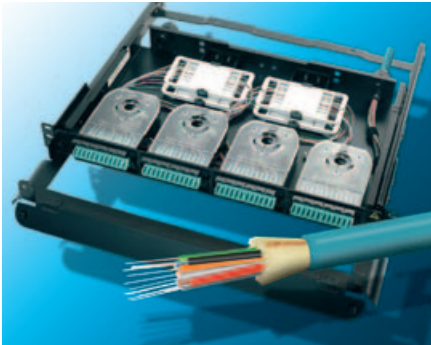
### Flight Support

- Baggage handling systems
- Air traffic control systems
- Airlines back-office systems
- Airline cargo systems
- Airlines hangar systems
- Flight plan filing systems
- Weather forecasting and informational systems

### Security

- Security systems
- X-ray systems
- Immigration access systems
- Customs and excise related systems
- Fire-Life-Safety (FLS) systems
- Access controls systems (CCTV, card access)
- Vehicle flow monitoring and control
- Police, Fire and Medical dispatching

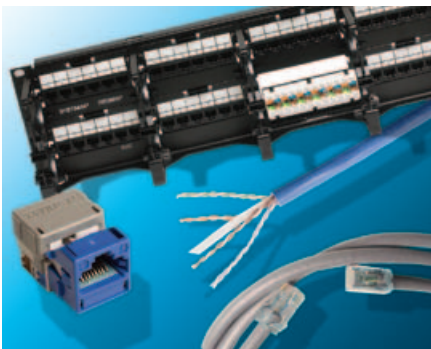




### SYSTIMAX® Fiber Optic Solutions



### SYSTIMAX® Intelligent Infrastructure Solutions



### SYSTIMAX® GigaSPEED® Solutions

Airport Challenges	CommScope Solutions
Large cabling distances (e.g., runway lighting)	TeraSPEED® SM and LazrSPEED® OM3 Fiber
Frequent tenant churn	Management through CommScope's truly structured cabling solution, incorporating correctly designed consolidation points, flood wiring and intelligent patching (iPATCH®) for rapid MACs (moves, adds and changes) in data and voice
Mission-critical systems (e.g., radar, air traffic control)	Testing and specification well beyond the highest international standards (including TIA, ISO and CENELEC)
Hazardous environments (e.g., aviation fuel)	Airport-sensitive cabling design, like the 5129 SYSTIMAX Heavy Duty Indoor/Outdoor Fiber Optic Cable for Airport Applications
High bandwidth requirements (e.g., digital signage, streaming video)	TeraSPEED SM, LazrSPEED OM3 Fiber and SYSTIMAX GigaSPEED X10D® (10 Gb/s solution with communications channel up to 100m)
Intelligent parking garages	Cabling to all intelligent parking bay sensors to allow for communication back to central control systems; digital entrance signage that displays the number of vacant spaces

CommScope Enterprise Solutions enable airports around the world to support current business and technology requirements and to take advantage of future opportunities by providing the right network infrastructure solution for any and every need.



[www.commscope.com](http://www.commscope.com)

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